AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently Amended) An input ~~Input~~ multiplexer (IMUX) for splitting a broad frequency band into a series of narrower frequency channels comprising [[of]] :

[[a]] bandpass ~~filter~~ filters each having a center frequency arranged one per frequency channel, each of said bandpass filters ~~filter~~ having an input and an output, ~~high circuit order bandpass filters with~~ and an ~~a circuit~~ order of more than 6; and

~~have zero positions in the transmission function on the imaginary frequency axis in the vicinity of the passband for improving the flank steepness and a low variation in the group running time within the pass band, achieved by an external running time equalizer or further zero positions in the transmission function with a finite real part or a combination hereof, with each of these inputs coupled to a low loss bus bar which comprises conducting pieces of optimized length~~

a low loss manifold formed of sections of transmission lines each of a predetermined length and respectively connected the input of one of said bandpass filters.

2. (Currently amended) The input multiplexer of claim 1, wherein the ~~bus bar~~ manifold connects the bandpass filters such that said center frequencies are arranged non-contiguously.

3. (Currently amended) The input multiplexer of claim 1, wherein the ~~busbar~~ manifold connects the bandpass filters such that said center frequencies are arranged contiguously.

4. (Currently amended) The input multiplexer of one of claims 1-3, wherein the bandpass filter and the ~~busbar~~ manifold are constructed in the waveguide technique, the coaxial technique, the dielectric technique and/or the planar technique.

5. (Currently amended) The input multiplexer of one of claims 1-3, wherein [[the]] a geometry of the low loss ~~busbar~~ manifold is ~~combine~~ a combline or herringbone.

6. (Currently amended) The input multiplexer of one of claims 1-3, wherein the bandpass filters ~~comprises~~ are resonators in [[the]] a single mode, dual mode, triple mode and/or in [[the]] quadruple mode operational configuration.

7. (Currently amended) The input multiplexer of one of claims 1-3, wherein the filters, with respect to their center frequency, are connected in any sequence with the ~~busbar~~ manifold.

8. (Currently amended) The input multiplexer of one of claims 1-3, further comprising devices for equalizing the bandpass filters and/or the ~~busbar~~ manifold.

9. (Currently amended) [[The]] A multiplex including two or more of the input multiplexer of one [[the]] of claims 1-3, wherein the ~~individual multiplexes~~ two or more of the input multiplexer are connected [[over]] through hybrid couplers and/or power splitters.

10. (Previously Presented) The multiplexer of one of claims 1-3, wherein the overall arrangement of the multiplexer covers all channels of an IMUX.

11. (Canceled)

12. (New) The input multiplexer of claims 1 wherein the bandpass filters each have a transmission function with zeros on the imaginary frequency axis in a vicinity of the passband so as to provide selectivity and a low variation in group delay within the pass band.

13. (New) The input multiplexer of claims 12 wherein the transmission functions further have zeros with a finite real part.

14. (New) The input multiplexer of claims 1 wherein the bandpass filters each have a transmission function with zeros with a finite real part.